SUMMARY OF HARVEST ESTIMATES AND LICENSE SALES FOR INDIANA'S INLAND AND OHIO RIVER COMMERCIAL FISHERIES, 2000-2002

Fish Management Report

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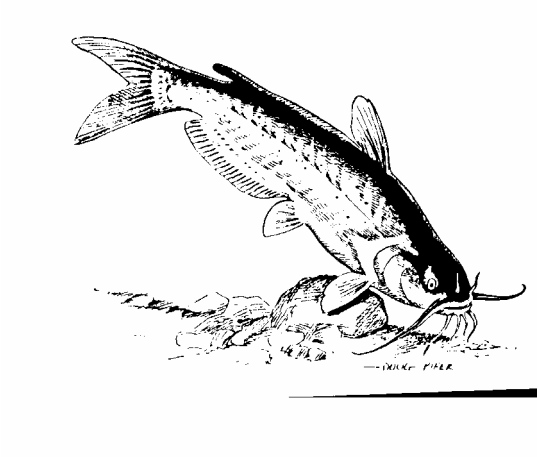

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EXECUTIVE SUMMARY

- Inland license and net sales continued their long term decline with new record lows set in 2002 (312 licenses and 1,183 net tags). Ohio River license sales also continued their long term decline with a new record low set in 2002 (30).

- Reported total harvest for 2000, 2001, and 2002 was 92,144, 75,978, and 109,536 pounds, respectively. Even though license and net tag sales in 2002 were both record lows, harvest in 2002 was at its highest since 1993. Fluctuations in the total harvest from year to year are due to a number of variables. The greatest influence appears to be major water level fluctuations.

- Catfish (channel, flathead, and blue) harvest declined through 2001 but then increased substantially in 2002 to 92,942 pounds. Catfish continued to be harvested from inland waters at rates much greater than the long term average and comprised 83%, 79%, and 85% of the total harvest during 2000, 2001, and 2002, respectively.

- The estimated monetary value of the 2000, 2001, and 2002 inland commercial harvest was $263,789, $215,080, and $315,001 compared to $285,095 for 1999 and $291,989 for 1998.

- Ohio River commercial harvest declined from 145,459 pounds in 2000 to 102,482 pounds in 2002. Paddlefish was the most abundant fish harvested by weight. Paddlefish on average comprised approximately 45% of the total reported harvest. Buffalo comprised the second largest portion of total harvest followed by the three catfish species: blue, channel, and flathead catfish.

- The reported paddlefish harvest by number was 2,063 in 2000, 4,060 in 2001, and 4,446 in 2002. Paddlefish egg harvest was 12,451 pounds in 2000, 6,562 lbs in 2001, and 8,659 lbs in 2002. As in 1999, no shovelnose sturgeon harvest was reported during 2000 to 2002.

- The monetary value of the Ohio River commercial fishery was estimated at $3,084,728 for 2000, $1,712,585 for 2001, and $2,149,059 for 2002. Paddlefish eggs comprised the bulk of the monetary value of the fishery (84 to 89%).

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Fish Management Report

INTRODUCTION

Persons using nets to catch fish from Indiana's rivers are regulated and licensed by the Department of Natural Resources (DNR), Division of Fish and Wildlife (DFW). Since 1977, fishers using nets on inland rivers have been required to report the species and weight of fish harvested. Although limited in several ways, the harvest reports submitted by commercial fishermen provide an index for evaluation of the river resource.

The objective of this report is to identify major patterns in the river net fishery by examining harvest information and license sales data. This report covers the commercial harvest for 2000, 2001, and 2002. Earlier reports (Glander 1984, 1987; Stefanavage 1990, 1999, 2001; Blackwell 1991, 1993; Carnahan 1993, 1995a, 1995b, 1996, 1997; Stiras 1998) summarize the 1977 to 1999 harvest estimates and license sales.

A November 1985 United States Supreme Court settlement between the states of Indiana and Kentucky granted Indiana control over a portion of the Ohio River. An Indiana law mandates that Indiana's Ohio River regulations be tailored after Kentucky's. Indiana's DFW started selling Ohio River commercial fishing licenses in January 1988 from the Sugar Ridge Fish and Wildlife Area office. Ohio River commercial fishermen were required to report their harvest effective 1/1/99.

BACKGROUND INFORMATION

Commercial fishing is currently limited to 923 miles of the Wabash, Ohio, Patoka, and White Rivers, including the East and West Forks of the White (Figure 1). A 200-mile segment of the Wabash River forms the boundary between Indiana and Illinois, and 358 miles of the Ohio River lies between Indiana and Kentucky.

Three different sets of regulations pertain to commercial fishing on the different rivers. Inland (Wabash upriver of the Indiana/Illinois boundary section, Patoka, and White Rivers, including the East and West Forks of the White) regulations are the most restrictive and limit fishers to four hoop nets. Seines and an unlimited number of hoop nets may be used by a fisher

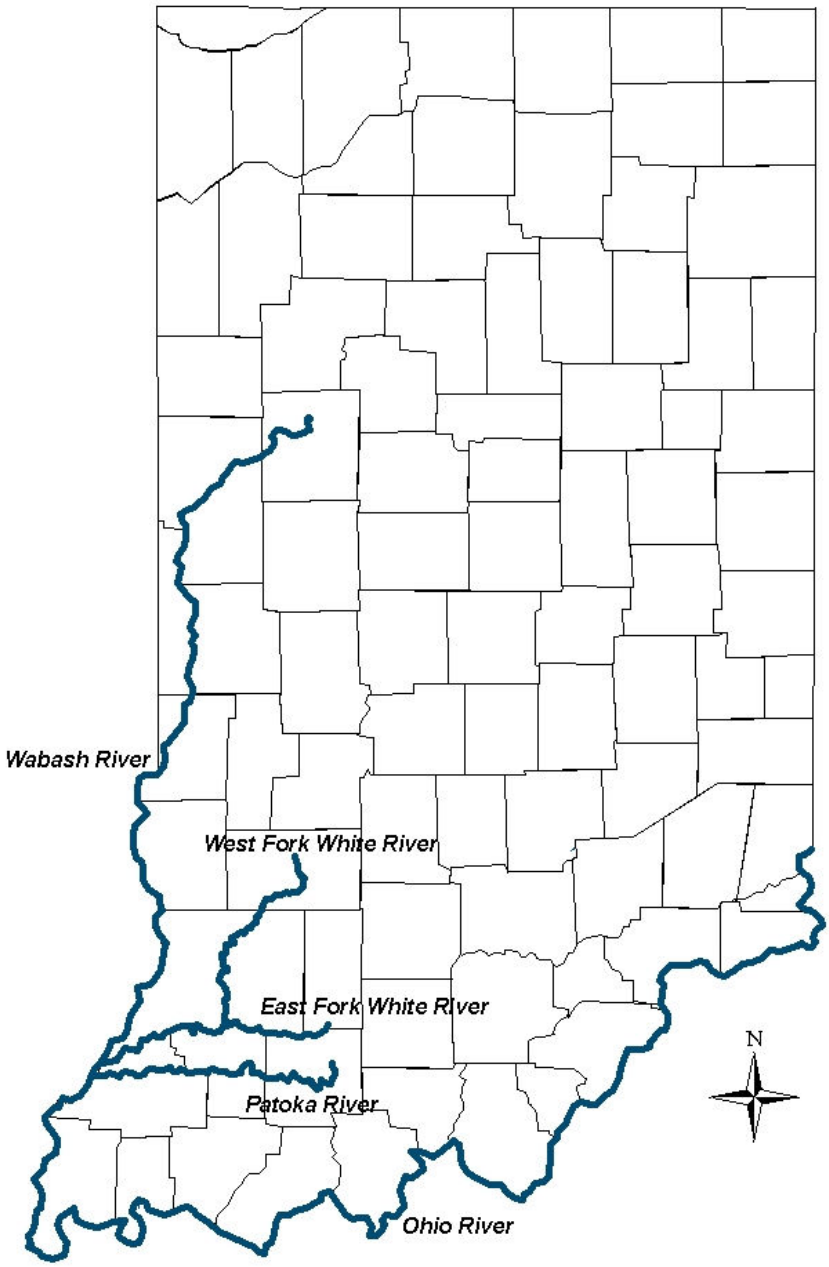

Figure 1. River reaches where commercial fishing is legal (indicated by heavy lines).

in the Wabash River boundary section. Ohio River fishers may use an unlimited amount of gear and may use additional types of gear (gill nets, trammel nets, trotlines, and slat traps). For the purposes of this report," inland" refers to all inland rivers versus or excluding the Ohio River.

See Appendix 1 for the current inland commercial fishing regulations and Appendix 2 for the current Ohio River regulations.

METHODS AND LIMITATIONS OF THE HARVEST ESTIMATES

Licensed net fishermen are required to submit monthly harvest reports indicating the species and weight of fish harvested. Greater communication with the licensees and improved data handling, storage, and analysis capabilities have increased the overall accuracy of the harvest information since 1983; however, all harvest estimates are based on unverified reports. The actual harvest is assumed to be higher than the estimates due to noncompliance with the reporting system, inaccurate reports, and illegal net fishing.

Licensees who are delinquent in submitting their harvest reports are mailed reminder notices. This is done to increase compliance with the mandatory harvest reporting system. Delinquent notices are generally issued in May, September, and at the end of the year. May and September notices simply state the months for which harvest reports are delinquent and request that the fishers submit the reports. January notices are worded more sternly. Licensees are warned that they will not be sold a license for the new year until delinquent reports are received.

Before 1984, harvest estimates were broken down by the licensee's county of residence and not by the river from which they harvested fish. Five counties contain or adjoin more than one river where net fishing is currently legal (Figure 1); therefore, it was not possible to determine the harvest from each river. Since 1984, commercial fishermen were required to report the river from which they harvested fish. This enabled harvest estimates to be broken down by river.

Starting in 1988, harvest was analyzed by catch per unit effort (CPUE) defined as the pounds of fish harvested per overnight hoop net set. This was determined per river by dividing the particular river's total harvest by the total number of overnight hoop net sets. Most commercial licensees do not complete the monthly harvest report's effort segment correctly; therefore, all effort and CPUE results were analyzed with extreme caution.

RESULTS AND DISCUSSION

License and Net Tag Sales

Inland net tag and license sales declined significantly in 1985 due to the issuance of a fish

consumption advisory affecting rivers open to commercial fishing (Figure 2). Sales slightly increased after that advisory was rescinded in early 1989, but have shown a general decreasing trend since 1999. Both license (342) and net tag (1,329) sales had declined to record lows in 1999. They rebounded slightly in 2000 (370 licenses and 1,384 net tags). Both again declined in 2001 (349 licenses and 1,254 net tags) with net tag sales reaching a new record low. They declined further in 2002 (312 licenses and 1,183 net tags) to again new record lows. Even though license and net tag sales in 2002 were both record lows, harvest in 2002 was at its highest since 1993.

In 1989, 118 Ohio River licenses were sold. Since 1989, license sales had declined from 63 in 1990, to 47 in 1995, 1996, and 1997, to 45 in 1998, and 40 in 1999. License sales increased from 34 in 2000 to 42 in 2001, but fell to a record low of 30 in 2002. Net tag sales increased from the record low of 520 in 1999 to 620 in 2000.

Historically, sales of inland commercial fishing licenses have been concentrated in counties where a relatively large population has access to a substantial river resource (Glander 1984). Dubois, Fountain, Gibson, Knox, Pike, Posey, and Vermillion counties have generally had the most licensed commercial fisherman (Table 1).

The portion of licensees submitting all of their monthly harvest reports on time as required was 67% for 1999 (Table 2). This dropped to 51% in 2000 and remained below 60% for the next two years. For 2002, 91% of the licensees eventually submitted all required reports, which is the highest submittal percentage since 1997.

Most harvest reports submitted in response to the final delinquent notice indicated that no fishing activity occurred during the months in question. This information is suspect since reports submitted for fishing activity seven or eight months after the deadline are likely inaccurate. Final delinquent notices are an effective method of increasing compliance with the mandatory reporting provision of the administrative rule; however, they produce little information which directly adds to the harvest estimates.

Trends in the Estimated Inland Harvest

Due to the factors which limit the accuracy of the harvest estimates, emphasis should not be placed on the numerical estimates themselves; rather, trends in the estimated harvest should be identified and analyzed. By looking at trends, which are less biased than the estimates, the

harvest information provided by inland commercial fishermen can be useful.

Reported total harvest for 2000, 2001, and 2002 was 92,144, 75,978, and 109,536 pounds, respectively. The relationship between net tag sales and total estimated harvest was generally not linearly positive (Figure 2). License and net tag sales increased in 2000, but harvest decreased to a record low (Table 3). For 2001, license sales declined, net tag sales declined to a record low, and harvest declined to another record low. However, although license and net tag sales declined to new record lows in 2002, harvest increased substantially. The largest harvests have not occurred in the years when the most tags were sold. For instance, the 1993 harvest was 92,103 pounds less than the 1985 harvest with only 21 more net tags sold. Many factors other than the number of net tags sold influence the total estimated harvest.

Fluctuations in the total harvest from year to year are due to a number of variables. The greatest influence appears to be major water level fluctuations. During high water events, fishermen lose nets, cannot find nets, or are prevented from checking or setting nets. During severe droughts, fishermen just do not catch many fish. Other factors influencing harvest are consumption advisories, hoop net theft, and fish theft.

Catfish (channel, flathead, and blue) harvest declined from 1999 (83,373 pounds) to 2000 (76,726 pounds). Harvest declined again in 2001 to 60,302 pounds but then increased substantially in 2002 to 92,942 pounds. During 2000, 2001 and 2002, catfish harvest continued from inland waters at rates much greater than the long term average (Figure 3). Since 1995, combined catfish harvest has ranged from 79% to 85% of total catch, while less valuable species such as carp, buffalo, and suckers continue to be less sought after. Catfish comprised 83%, 79%, and 85% of the total harvest during 2000, 2001, and 2002, respectively.

Channel catfish harvest declined substantially from 1999 (47,002 pounds) to 2000 (42,742 pounds), declined again in 2001 (30,435 pounds), and then increased substantially in 2002 to 46,553 pounds (Figure 4). Flathead catfish harvest increased from 1999 (26,730 pounds) to 2000 (28,525 pounds), declined in 2001 (23,062 pounds), and then increased substantially in 2002 to 35,560 pounds. Blue catfish harvest saw a significant decline from 1999 (9,641 pounds) to 2000 (5,459 pounds), increased in 2001 (6,805 pounds), and increased substantially in 2002 (10,829 pounds). Catfish relative abundance during 2002 ranged from 77.2% for Patoka River to 94.3% for the Main Stem White River (Figure 5).

Total effort (number of overnight hoop net sets) had been on a decreasing trend from 1993 through 1996. From 1990 to 1992, total effort was 61,823, 58,519, and 71,632 overnight hoop net sets, respectively. Since 1993, effort decreased from 57,331 to 45,470 in 1996, a 21% decrease over four years. In 1997, effort increased by 10% to 55,473 overnight hoop net sets. Effort dropped to 48,254 sets in 1998, 41,838 sets in 1999, and less than 37,000 sets from 2000 to 2002 (Appendix 3, 4, and 5).

Retail values used to determine monetary estimates were $3.00/pound for catfish and $2.18/pound for other fish. The estimated monetary value of the 2000, 2001, and 2002 harvest was $263,789, $215,080, and $315,001 compared to $285,095 for 1999 and $291,989 in 1998.

Distribution of Harvest by Inland River

Harvest estimates per river did not necessarily correspond to the miles of river open to commercial fishing. This can be easily explained by the difference in river size. For example, the lower Wabash River near Vincennes has an average annual flow of 13,730 cubic feet per second (CFS) and may reach a width of 1 mile. In contrast, the Patoka River at Winslow has an annual average flow of 590 CFS and is only approximately 100 feet wide.

The Wabash River accounted for approximately half of the total inland harvest from 2000 to 2002 (Table 4). Although effort (i.e. the number of overnight hoop net sets) was lower in 2002 than the previous three years, the 2002 Wabash harvest of 51,707 pounds and catch per unit effort (CPUE, i.e. pounds per net) of 3.52 was significantly greater. In 2002, harvest increased by 62.2% from 2001. The catfish CPUE decreased in 2001, but increased by 65.5% in 2002.

The Patoka River accounted for less than 10% of the total inland harvest from 2000 to 2002, yet the Patoka harvest increased each year since 2000. Both the total and catfish CPUE increased from 1999 to 2000, decreased in 2001, and increased in 2002. The Patoka River's catfish CPUE also increased substantially in 2002 (65.7%).

The Main Stem White River accounted for approximately a fourth of the total inland harvest from 1999 to 2002. Main Stem harvest was significantly lower (57.6%) in 2001 than in 2000, but reached over 30,000 pounds in 2002 due in part to increased effort. As from the Patoka, both the total and catfish CPUE increased from 1999 to 2000, decreased in 2001, and increased in 2002 (83.5% and 102.7%, respectively).

The East Fork White River accounted for less than 10% of the total inland harvest from

1999 to 2002, but East Fork harvest increased each year from 2000 to 2002. Both the total and catfish CPUE dropped from 1999 to 2000, but increased the next two years.

The West Fork White River accounted for less than 15% of the total inland harvest from 1999 to 2002. This portion decreased in 2001 and 2002, but West Fork harvest increased in 2002. Both the total and catfish CPUE of 2000 and 2001 were lower than in 1999, but were greater in 2002 than the previous three years, increasing over 40% from 2001.

Ohio River Harvest

Ohio River commercial fishers reported a total harvest of 145,459 pounds in 2000 (Appendix 6), 112,932 lbs in 2001 (Appendix 7), and 102,482 lbs in 2002 (Appendix 8). Though harvest decreased over the three years, harvest was significantly greater than the 36,871 pounds reported in 1999. The harvest consisted of eleven species and species groupings. As in 1999, paddlefish was the most abundant fish harvested by weight. Approximately 61,000 pounds of paddlefish were harvested annually from 2000 to 2002. Paddlefish on average comprised approximately 45% of the total reported harvest. Buffalo comprised the second largest portion of total harvest from 2000 to 2002 followed by the three catfish species: blue, channel, and flathead catfish.

The number of paddlefish reported harvested was 2,063 in 2000, 4,060 in 2001, and 4,446 in 2002. Paddlefish egg harvest was 12,451 pounds in 2000, 6,562 lbs in 2001, and 8,659 lbs in 2002. As in 1999, no shovelnose sturgeon harvest was reported during 2000 to 2002.

Retail values used to determine monetary estimates were $3.00/pound for catfish, $2.18/pound for other fish, and $220/pound for paddlefish eggs. The monetary value of the Ohio River commercial fishery was estimated at $3,084,728 for 2000, $1,712,585 for 2001, and $2,149,059 for 2002. Paddlefish eggs comprised the bulk of the monetary value of the fishery (84 to 89%).

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Approved by: Brian M. Schoenung, Fisheries Supervisor

Date: August 28, 2007

Table 1. Number of inland commercial fishermen by county, Avg. 1984 to 2002, 2000, 2001, and 2002.

		Number of Fishermen		
County	Avg. 1984-2002	2000	2001	2002
Daviess	11	13	3	5
Dubois	37	23	22	28
Fountain	30	23	28	20
Gibson	63	58	58	54
Greene	24	12	17	9
Knox	49	34	27	29
Martin	4	4	9	3
Parke	13	9	8	11
Pike	51	53	47	53
Posey	34	35	35	26
Sullivan	13	5	4	8
Tippecanoe	4	5	2	2
Vermillion	37	31	32	24
Vigo	28	28	22	22
Warren	9	9	6	5
Other	26	21	15	13
TOTALS	437	363	335	312

Table 2. Number of inland commercial fishing licenses sold, number of licensees submitting all required monthly harvest reports on time and response to final delinquent notice, 1979 to 2002.

Year	Licenses Sold	Number Submitting All Reports On Time	Percent	Number Responding To Final Notice	Total % Sending In All Reports
1979	470	261	56	84	73
1980	534	340	64	88	80
1981	530	329	62	116	84
1982	579	*	*	*	*
1983	607	387	64	138	86
1984	604	425	70	109	88
1985	475	364	77	73	92
1986	447	303	68	93	89
1987	469	273	58	157	92
1988	449	263	59	158	94
1989	492	237	48	201	89
1990	481	231	48	181	86
1991	464	271	58	153	91
1992	490	250	51	162	84
1993	454	261	57	149	90
1994	445	302	68	108	92
1995	423	149	35	236	91
1996	421	274	65	97	88
1997	411	284	69	95	92
1998	400	84	21	221	76
1999	342	230	67	46	81
2000	370	188	51	118	83
2001	349	203	58	67	77
2002	317	181	57	107	91
Avg 1979-2002	459	265	58	129	86

* 1982 delinquent notice information unavailable.

Table 3. Inland commercial fishing license sales, net tag sales, and total estimated harvest, Avg. 1977 to 2002.

Year	Number of Licenses Sold	Number of Tags Sold	Estimated Total Harvest (pounds)
1977	544	1,689	194,419
1978	451	1,551	210,145
1979	470	1,603	198,719
1980	534	1,788	234,048
1981	530	1,894	228,402
1982	579	2,012	*
1983	607	2,106	210,515
1984	604	2,072	197,355
1985	475	1,658	201,889
1986	447	1,657	162,217
1987	469	1,740	142,404
1988	449	1,682	128,271
1989	492	1,839	185,123
1990	481	1,847	169,249
1991	464	1,784	117,382
1992	490	1,745	121,201
1993	454	1,631	109,786
1994	445	1,588	94,509
1995	423	1,624	102,613
1996	421	1,595	103,225
1997	411	1,588	104,657
1998	400	1,513	102,774
1999	342	1,329	99,417
2000	370	1,387	92,144
2001	349	1,254	75,978
2002	317	1,183	109,536
Avg. 1977-2002	462	1,668	147,839

*1982 harvest estimate unavailable.

Table 4. Distribution of 1987 to 2002 inland commercial harvest (pounds) and commercial fishing resource (miles of river) by river segment. Numbers in parenthesis are percent of the total.

River Segment	Resource (Miles)*	Lbs. Harvested Avg. 1987-2002	2000	2001	2002
Wabash	310.0 (59.9)	61,509 (52.8)	45,926 (49.8)	41,054 (54.0)	51,703 (47.2)
Patoka	86.0 (15.2)	7,531 (6.5)	6,671 (7.2)	6,939 (9.1)	7,937 (7.2)
White-Main Stem	49.5 (8.8)	19,190 (16.5)	21,441 (23.3)	12,348 (16.3)	31,512 (28.8)
White-East Fork	34.5 (6.1)	12,292 (10.5)	4,684 (5.1)	6,668 (8.8)	7,078 (6.5)
White-West Fork	85.0 (15.0)	15,619 (13.4)	13,422 (14.6)	8,969 (11.8)	11,306 (10.3)
TOTALS	565	116,141	92,144	75,978	109,536

*From Hoggatt, 1975

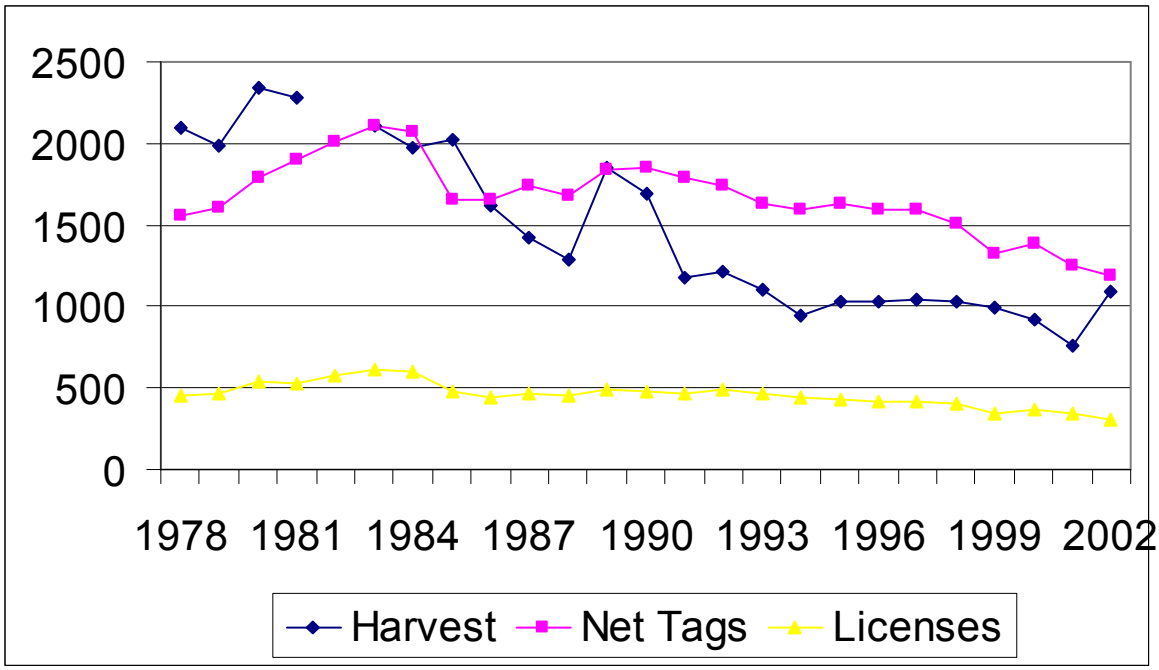

Figure 2. Estimated total harvest (pounds x 100), number of nets sold, and number of licenses sold, 1977 to 2002.

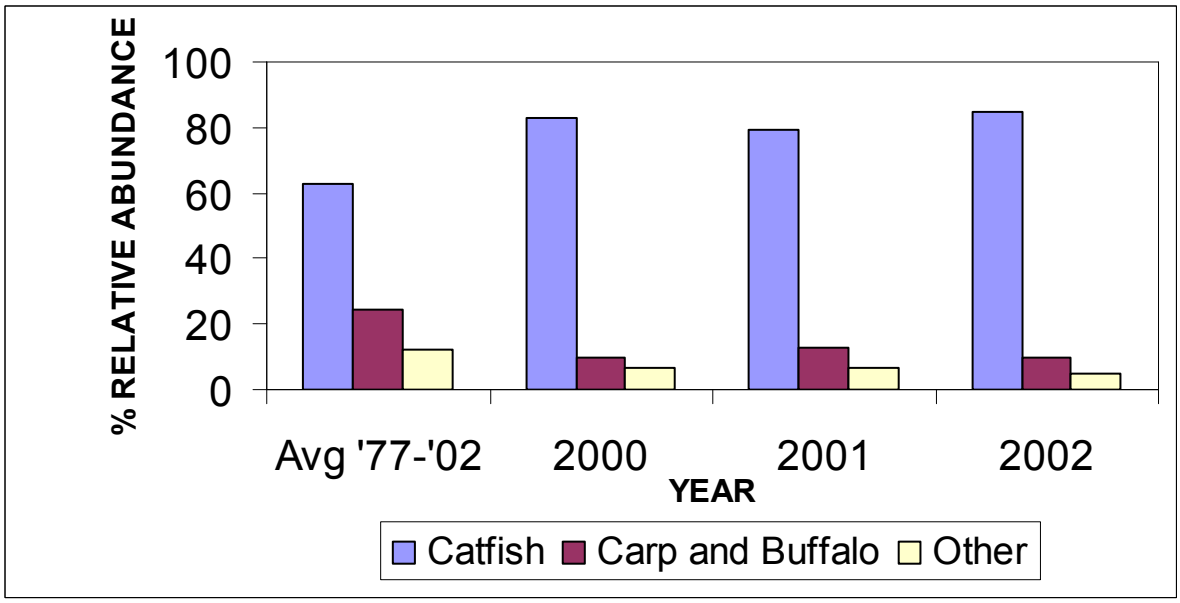

Figure 3. Relative abundance (percent of the total weight harvested) of catfish, carp, buffalo, and other commercially valuable fish in the inland commercial harvest, avg. 1977 to 2002, 2000, 2001, and 2002.

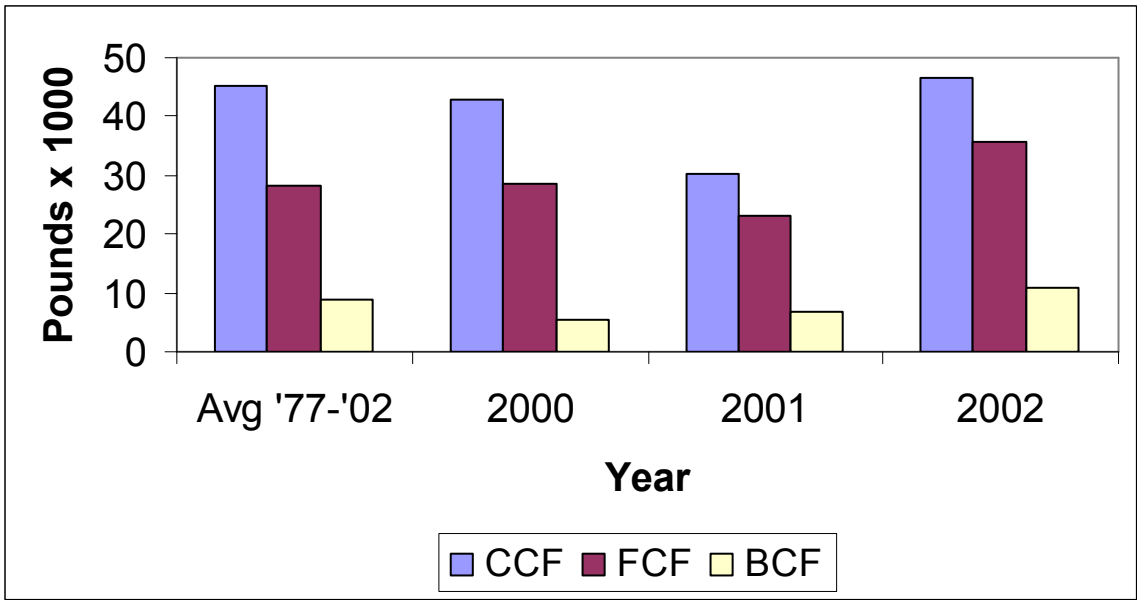

Figure 4. Estimated harvest (pounds x 1000) of channel, flathead, and blue catfish in the inland commercial fishery, Avg. 1977 to 2002, 2000, 2001, and 2002.

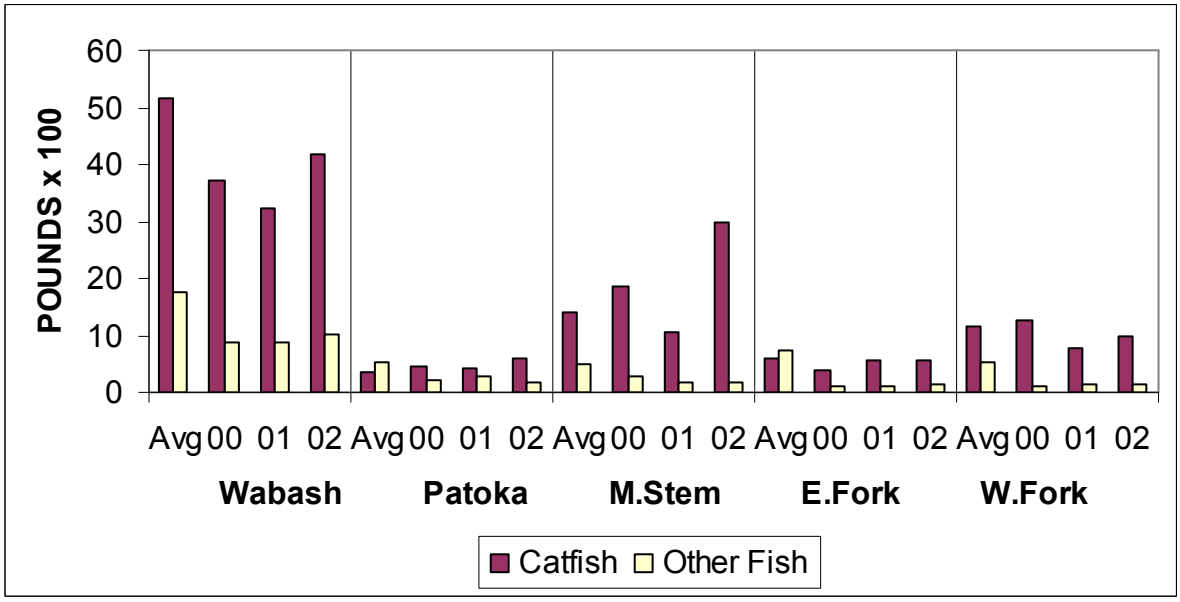

Figure 5. Estimated weight (pounds x 1000) of fish harvested by licensed inland commercial fishermen from the Wabash, Patoka, and White Rivers, Average 1984 to 2002, 2000, 2001, and 2002.

Appendix 1. Inland commercial fishing regulations (4/14/07).

Rule 8. Commercial Fishing
312 IAC 9-8-1 Applicability
Authority: IC 14-22-2-6; IC 14-22-13
Affected: IC 14-22

Sec. 1. This rule applies to a person who is issued a commercial fishing license by the department. *(Natural Resources Commission; 312 IAC 9-8-1; filed May 12, 1997, 10:00 a.m.: 20 IR 2721; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286)*

312 IAC 9-8-2 Commercial fishing except on the Ohio River; general provisions
Authority: IC 14-10-2-4; IC 14-22-2-6; IC 14-22-13
Affected: IC 14-22-14-23

Sec. 2. (a) This section applies to commercial fishing on:
(1) waters of this state;
(2) boundary waters; or
(3) waters containing state-owned fish;
other than the Ohio River.
(b) No person may take or sell fish except under this section and 312 IAC 9-10. A person may take fish with the aid of illumination of:
(1) a spotlight;
(2) a searchlight; or
(3) an artificial light;
where lawfully engaged in commercial fishing.
(c) A person subject to this section must not possess trout or salmon.
(d) A person must not possess or sell any of the following taken from the waters described in subsection (a):
(1) Chubs.
(2) Northern pike.
(3) Chain pickerel.
(4) Muskellunge.
(5) Tiger muskellunge.
(6) White bass.
(7) Yellow bass.
(8) Striped bass.
(9) Hybrid striped bass.
(10) Walleye.
(11) Sauger.
(12) Saugeye.
(13) Smallmouth bass.
(14) Largemouth bass.
(15) Spotted bass.
(16) Bluegill.
(17) Redear sunfish.
(18) Rock bass.
(19) Crappie.
(20) American eel.
(21) Paddlefish.
(22) Lake sturgeon.
(23) Lake herring.
(24) Blue catfish less than ten (10) inches long.
(25) Channel catfish less than ten (10) inches long.
(26) Flathead catfish less than ten (10) inches long.

(27) Lake whitefish less than eighteen (18) inches long.

(28) Yellow perch.

(29) Shovelnose sturgeon taken on June 1 through September 30. Shovelnose sturgeon taken from October 1 through May 31 must be at least twenty-five (25) inches in fork length.

A person who possesses or sells a fish described in this subsection must comply with 312 IAC 9-10-2.

(e) This subsection governs the reporting of fish catches as follows:

(1) A license holder, other than a license holder on Lake Michigan, shall keep accurate daily records on a departmental form of the following:

(A) The pounds and species of fish caught.

(B) The number of pieces of each type of gear fished by date.

(C) The county fished.

The license holder shall submit the completed form to the division by the fifteenth day of each month for the preceding month whether the license holder fished or not. The license holder shall allow on-board and dockside inspections of the gear and catch at any time by the director or the director's representative.

(2) A license holder on Lake Michigan must comply with the reporting requirements of IC 14-22-14-23 and section 3(g) of this rule.

(Natural Resources Commission; 312 IAC 9-8-2; filed May 12, 1997, 10:00 a.m.: 20 IR 2721; filed May 28, 1998, 5:14 p.m.: 21 IR 3724; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286; filed Feb 27, 2007, 2:25 p.m.: 20070328-IR-312060262FRA)

312 IAC 9-8-4 Commercial fishing on the Wabash River boundary waters

Authority: IC 14-22-2-6; IC 14-22-13

Affected: IC 14-22

Sec. 4. (a) This section applies to commercial fishing conducted on the Wabash River boundary waters between Indiana and Illinois and is supplemental to section 2 of this rule.

(b) A license holder under this section may use a dip-net, hoop-net, fyke-net, basket-net, basket-trap, or trap-net made of twine or cords, with or without wings or leads. It is unlawful to use wings or leads constructed of any twine or cord smaller than size 9 (forty-two thousandths (0.042) inches) diameter. It is unlawful to use a net more than two hundred (200) feet long, including wings and leads. It is unlawful to use a net having stretch mesh less than two (2) inches. It is unlawful to use a net seine which obstructs more than one-half (½) of the width of the river.

(c) A license holder may use a seine. It is unlawful to use a seine which exceeds two hundred (200) feet long. It is unlawful to use a seine having stretch mesh less than five (5) inches. It is unlawful to use a seine which obstructs more than one-half (½) of the width of the river.

(d) Each piece of fishing gear in use must be tended not less frequently than once every forty-eight (48) hours. Fish taken by the gear must be removed. Each item of gear must be removed from the waters fished immediately upon the completion of fishing. *(Natural Resources Commission; 312 IAC 9-8-4; filed May 12, 1997, 10:00 a.m.: 20 IR 2725; filed May 28, 1998, 5:14 p.m.: 21 IR 3727; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286)*

312 IAC 9-8-5 Commercial fishing on inland rivers

Authority: IC 14-22-2-6; IC 14-22-13

Affected: IC 14-22

Sec. 5. (a) This section applies to commercial fishing on inland rivers of Indiana and is supplemental to section 2 of this rule.

(b) It is unlawful to conduct commercial fishing on inland waters containing state-owned fish or waters of this state, except for the following rivers:

(1) The Wabash River downstream from the city limits of Lafayette to where the river forms the boundary between Indiana and Illinois.

(2) The White River downstream from the junction of its east and west forks to where the White River joins the Wabash River.

(3) The west fork of the White River downstream from its junction with the Eel River in Greene County to the junction of the east and west forks of the White River.

(4) The east fork of the White River downstream from its junction with the Lost River in Martin County to the

junction of the east and west forks of the White River.

(5) The Patoka River three hundred (300) yards downstream of the dam below the State Road 164 bridge in the city of Jasper to where the Patoka River joins the Wabash River.

(c) A license holder under this section may use hoop-nets or trap-nets made of twine or cord. It is unlawful to use more than four (4) hoop-nets or trap-nets. It is unlawful to use a net having a diameter, width, or height of more than six (6) feet. It is unlawful to use a net having stretch mesh less than two (2) inches.

(d) Each piece of fishing gear in use must be tended not less frequently than once every forty-eight (48) hours. Fish taken by the gear must be removed. Each item of gear must be removed from the waters fished immediately upon the completion of fishing. *(Natural Resources Commission; 312 IAC 9-8-5; filed May 12, 1997, 10:00 a.m.: 20 IR 2725; filed May 28, 1998, 5:14 p.m.: 21 IR 3727; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286)*

Appendix 2. Ohio River commercial fish regulation (4/14/07).

312 IAC 9-8-6 Commercial fishing on the Ohio River

Authority: IC 14-10-2-4; IC 14-22-2-6; IC 14-22-13

Affected: IC 14-22

Sec. 6. (a) This section applies to commercial fishing on the Ohio River.

(b) No person shall take or sell fish except in accordance with this section and 312 IAC 9-10. A person may take fish with the aid of illumination of:

(1) a spotlight;

(2) a searchlight; or

(3) an artificial light;

where lawfully engaged in commercial fishing.

(c) A license holder under this section may take and sell all species of fish from the Ohio River except the following:

(1) Largemouth bass.

(2) Smallmouth bass.

(3) Spotted bass.

(4) Rock bass.

(5) White crappie.

(6) Black crappie.

(7) Walleye.

(8) Sauger.

(9) Saugeye.

(10) Striped bass.

(11) White bass.

(12) Hybrid striped bass.

(13) Yellow bass.

(14) Muskellunge.

(15) Northern pike.

(16) Tiger muskellunge.

(17) Chain pickerel.

(18) Lake sturgeon.

(19) Trout.

(20) Salmon.

(21) Shovelnose sturgeon taken on June 1 through September 30. Shovelnose sturgeon taken from October 1 through May 31 must be at least twenty-five (25) inches in fork length.

(d) A license holder under this section must tag each item of gear so that a conservation officer may determine if the:

(1) gear is properly licensed; and

(2) license holder is complying with the law.

(e) No person shall possess a seine, net, or commercial trotline except as authorized for a commercial fishing license for the Ohio River. This subsection does not apply to a manufacturer, retailer, or wholesale dealer who possesses gear exclusively for sale.

(f) Commercial fishing nets authorized under this section cannot be used on a bay or inlet of the Ohio River. A line drawn from point to point of a bay or inlet denotes the limits of the fishing zone. Commercial gear cannot be used within fifty (50) yards of the mouth of a stream. Commercial gear, except slat traps, cannot be used in the following locations:

(1) John T. Myers Dam downstream to the outer lock wall and the portion of the split channel around the southern part of Wabash Island from the fixed weir dam to the first dike.

(2) Newburgh Dam downstream to the end of the outer lock wall.

(3) Cannelton Dam downstream to the end of the outer lock wall.

(4) McAlpine Dam downstream to the K and I railroad bridge.

(5) Markland Dam downstream to the end of the outer lock wall.

(g) Each item of fishing gear in use must be tended not less frequently than once every twenty-four (24) hours and all fish taken by the gear removed, except that baited hoop nets or slat traps may be left unattended for not more than seventy-two (72) hours. Each item of gear must be removed from the waters in which the item was fished immediately upon usage.

(h) Gear is authorized only as set forth as follows:

(1) Lines and mesh must be made of:

(A) linen;

(B) cotton; or

(C) a flexible synthetic fiber.

(2) The following restrictions apply to a hoop net, wing net, straight lead net, or heart lead net:

(A) Each net described in this subdivision must have a minimum bar mesh size of one (1) inch.

(B) Hoops may be any size, shape, or material.

(C) The maximum length of the lead or wing is sixty (60) feet.

(D) One (1) tag must be attached to the front hoop of each net.

(3) The following restrictions apply to a gill or trammel net:

(A) The minimum bar mesh size is four (4) inches.

(B) The nets referenced in this subdivision may be fished weighted or as a flag net.

(C) A tag must be attached to the net at intervals not less than one hundred (100) feet apart.

(4) The following restrictions apply to a commercial trotline:

(A) Each line must have more than fifty (50) hooks placed not closer than eighteen (18) inches apart.

(B) One (1) tag must be attached.

(C) The trotline must be:

(i) not longer than three thousand (3,000) feet, including staging; and

(ii) fished separately rather than tied in a continuous line.

(5) The following restrictions apply to a seine:

(A) A seine must have the following:

(i) A minimum bar mesh size of one (1) inch.

(ii) Both float and lead lines.

(iii) Wood, fiberglass, metal poles, or brails attached to each end.

(B) A seine in the water must be attended by persons pulling the seine through the water for the entrapment of fish.

(C) A seine must have a tag attached at intervals not less than one hundred (100) feet apart.

(6) The following restrictions apply to a slat trap basket:

(A) No wire or other mesh may be added to the trap.

(B) At least two (2) openings not less than one and one-fourth (1¼) inches wide must be located between the slats. These openings shall not be restricted by cross-bracings shorter than eight (8) inches long.

(C) The trap shall be not larger than two (2) feet in diameter or square end measure.

(D) A tag must be attached to the open ring or square.

(i) A license holder must do the following:

(1) Keep accurate daily catch records on a departmental form of the following:

(A) The pounds and species of fish caught by gear type.

(B) The number of paddlefish and shovelnose sturgeon caught by gear type.

(C) The pounds of paddlefish, shovelnose sturgeon, sucker, and eggs sold.

(D) The location fished by pool, river mile, and county.

(2) Submit to the department the completed form required under subdivision (1) by the fifteenth day of each month for the preceding month whether the license holder fished or not.

(3) Allow on-board and dockside inspection of the gear and catch at any time by the director or the director's representative.

(Natural Resources Commission; 312 IAC 9-8-6; filed May 12, 1997, 10:00 a.m.: 20 IR 2725; filed May 28, 1998, 5:14 p.m.: 21 IR 3727; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286; filed Feb 27, 2007, 2:25 p.m.: 20070328-IR-312060262FRA)

Appendix 3. Estimated weight (pounds) and CPUE of fish harvested from Indiana's inland commercial fishery, 2000.

	REPORTED HARVEST (POUNDS)					
Species	Wabash	Patoka	White Main Stem	White East Fork	White West Fork	Species Total
Channel catfish	20,404	1,457	10,933	2,043	7,905	42,742
Flathead catfish	12,645	3,143	7,291	1,447	3,999	28,525
Blue catfish	4,187	26	415	200	631	5,459
Carp	544	47	165	245	45	1,046
Buffalo	5,001	1,542	1,080	188	533	8,344
Suckers	884	28	836	46	211	2,005
Drum	1,513	426	713	515	82	3,249
Other fish	748	2	8	0	16	774
Totals	45,926	6,671	21,441	4,684	13,422	92,144
Effort (no. nets)	16,307	2,852	7,664	2,912	5,065	34,800
CPUE (lbs./net)	2.82	2.34	2.80	1.61	2.65	2.65
	CATCH PER UNIT EFFORT (CPUE)					
Channel catfish	1.25	0.51	1.43	0.70	1.56	1.23
Flathead catfish	0.78	1.10	0.95	0.50	0.79	0.82
Blue catfish	0.26	0.01	0.05	0.07	0.12	0.16
Carp	0.03	0.02	0.02	0.08	0.01	0.03
Buffalo	0.31	0.54	0.14	0.06	0.11	0.24
Suckers	0.05	0.01	0.11	0.02	0.04	0.06
Drum	0.09	0.15	0.09	0.18	0.02	0.09
Other fish	0.05	0.00	0.00	0.00	0.00	0.02

Appendix 4. Estimated weight (pounds) and CPUE of fish harvested from Indiana's inland commercial fishery, 2001.

REPORTED HARVEST (POUNDS)

Species	Wabash	Patoka	White Main Stem	White East Fork	White West Fork	Species Total
Channel catfish	15,392	2,044	6,149	3,371	3,479	30,435
Flathead catfish	12,197	2,063	3,501	2,009	3,292	23,062
Blue catfish	4,799	102	867	240	797	6,805
Carp	628	41	150	252	275	1,346
Buffalo	4,442	2,054	1,253	329	707	8,785
Suckers	542	286	353	84	244	1,509
Drum	455	349	73	332	175	1,384
Other fish	2,599	0	2	51	0	2,652
Totals	41,054	6,939	12,348	6,668	8,969	75,978
Effort (no. nets)	18,890	4,262	7,007	3,240	3,215	36,614
CPUE (lbs./net)	2.17	1.63	1.76	2.06	2.79	2.08

CATCH PER UNIT EFFORT (CPUE)

Channel catfish	0.81	0.48	0.88	1.04	1.08	0.83
Flathead catfish	0.65	0.48	0.50	0.62	1.02	0.63
Blue catfish	0.25	0.02	0.12	0.07	0.25	0.19
Carp	0.03	0.01	0.02	0.08	0.09	0.04
Buffalo	0.24	0.48	0.18	0.10	0.22	0.24
Suckers	0.03	0.07	0.05	0.03	0.08	0.04
Drum	0.02	0.08	0.01	0.10	0.05	0.04
Other fish	0.14	0.00	0.00	0.02	0.00	0.07

Appendix 5. Estimated weight (pounds) and CPUE of fish harvested from Indiana's inland commercial fishery, 2002.

	REPORTED HARVEST (POUNDS)					
Species	Wabash	Patoka	White Main Stem	White East Fork	White West Fork	Species Total
Channel catfish	22,589	2,720	14,275	2,631	4,338	46,553
Flathead catfish	12,303	3,076	13,129	2,708	4,344	35,560
Blue catfish	6,760	330	2,273	276	1,190	10,829
Carp	813	0	185	35	130	1,163
Buffalo	5,722	1,205	1,150	491	999	9,567
Suckers	595	126	214	5	167	1,107
Drum	719	480	272	908	138	2,517
Other fish	2,202	0	14	24	0	2,240
Totals	51,703	7,937	31,512	7,078	11,306	109,536
Effort (no. nets)	14,698	3,732	9,746	3,167	2,826	34,169
CPUE (lbs./net)	3.52	2.13	3.23	2.23	4.00	3.21
	CATCH PER UNIT EFFORT (CPUE)					
Channel catfish	1.54	0.73	1.46	0.83	1.54	1.36
Flathead catfish	0.84	0.82	1.35	0.86	1.54	1.04
Blue catfish	0.46	0.09	0.23	0.09	0.42	0.32
Carp	0.06	0.00	0.02	0.01	0.05	0.03
Buffalo	0.39	0.32	0.12	0.16	0.35	0.28
Suckers	0.04	0.03	0.02	0.00	0.06	0.03
Drum	0.05	0.13	0.03	0.29	0.05	0.07
Other fish	0.15	0.00	0.00	0.01	0.00	0.07

Appendix 6. Reported pounds of fish, number of paddlefish and shovelnose sturgeon, and pounds of paddlefish and shovelnose sturgeon eggs harvested from Indiana's Ohio River commercial fishery, 2000.

REPORTED HARVEST (POUNDS) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Blue catfish	350	486	1,572	885	142	382	1,556	1,943	582	1,325	340	200	9,763
Buffalo	675	129	1,274	195	1,160	1,054	1,689	10,266	7,761	14,822	0	5,704	44,729
Carp*	0	0	4	0	0	35	0	0	0	0	0	0	39
Carpsucker	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel catfish	0	0	158	229	1,559	2,054	2,991	1,068	1,052	2,481	385	1,024	13,001
Freshwater drum	0	0	0	0	0	4	0	0	0	0	0	0	4
Flathead catfish	75	265	525	201	2,659	4,304	1,132	1,132	883	549	115	40	11,880
Other**	0	0	0	0	0	0	0	0	53	0	0	0	53
Paddlefish	1,580	5,729	23,797	23,098	2,867	0	0	0	35	341	3,906	4,637	65,990
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0
Sucker & redhorse***	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	2,680	6,609	27,330	24,608	8,387	7,833	7,368	14,409	10,366	19,518	4,746	11,605	145,459

REPORTED HARVEST (NUMBER) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Paddlefish	152	181	525	744	80	0	0	0	4	33	137	207	2,063
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0

REPORTED HARVEST (POUNDS OF EGGS) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Paddlefish	235	730	4,268	5,393	419	0	0	0	0	33	717	656	12,451
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0

*Includes bighead, silver, grass, and common carp.
**Includes gar, bowfin, and eel.
***Includes white sucker, spotted sucker, and all redhorse.

Appendix 7. Reported pounds of fish, number of paddlefish and shovelnose sturgeon, and pounds of paddlefish and shovelnose sturgeon eggs harvested from Indiana's Ohio River commercial fishery, 2001.

REPORTED HARVEST (POUNDS) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Blue catfish	679	410	970	1,328	2,469	820	523	430	630	1,380	1,000	195	10,834
Buffalo	229	265	1,738	6,450	3,357	2,928	2,699	1,835	2,066	7,225	2,545	260	31,597
Carp*	10	40	45	25	0	0	0	0	10	55	15	0	200
Carpsucker	0	0	0	0	0	0	0	0	0	0	0	0	0
Channel catfish	0	0	1,097	745	1,320	1,304	1,367	511	382	524	105	30	7,385
Freshwater drum	0	0	0	36	0	0	0	0	10	0	0	0	46
Flathead catfish	50	0	305	652	1,453	3,014	1,541	430	359	880	795	50	9,529
Other**	0	0	0	0	0	0	0	0	53	0	0	0	53
Paddlefish	3,686	2,506	7,019	18,440	1,074	0	0	0	295	1,310	14,508	4,389	53,227
Shad	0	61	0	0	0	0	0	0	0	0	0	0	61
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0
Sucker & redhorse***	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	4,654	3,282	11,174	27,676	9,673	8,066	6,130	3,206	3,805	11,374	18,968	4,924	112,932

REPORTED HARVEST (NUMBER) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Paddlefish	297	251	509	1,489	68	0	0	0	35	74	962	375	4,060
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0

REPORTED HARVEST (POUNDS OF EGGS) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Paddlefish	305	313	964	2,829	118	0	0	0	2	27	1,293	711	6,562
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0

*Includes bighead, silver, grass, and common carp.
**Includes gar, bowfin, and eel.
***Includes white sucker, spotted sucker, and all redhorse.

Appendix 8. Reported pounds of fish, number of paddlefish and shovelnose sturgeon, and pounds of paddlefish and shovelnose sturgeon eggs harvested from Indiana's Ohio River commercial fishery, 2002.

REPORTED HARVEST (POUNDS) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Blue catfish	450	0	732	588	1,247	625	967	429	1,080	604	420	203	7,345
Buffalo	120	0	1,185	2,160	4,278	1,825	775	0	890	1,846	210	0	13,289
Carp*	0	0	0	0	0	0	0	0	0	0	0	0	0
Carpsucker	10	0	0	0	0	0	0	0	0	0	0	0	10
Channel catfish	0	0	138	108	680	1,679	2,160	148	50	270	75	0	5,308
Freshwater drum	0	0	12	0	0	84	0	0	0	0	0	0	96
Flathead catfish	430	0	378	412	1,640	6,838	1,665	65	165	507	290	163	12,553
Other**	0	0	0	0	0	0	0	0	0	0	0	0	0
Paddlefish	8,717	1,739	13,899	24,430	1,254	0	0	0	0	515	8,140	5,187	63,881
Shad	0	0	0	0	0	0	0	0	0	0	0	0	0
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0
Sucker & redhorse***	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	9,727	1,739	16,344	27,698	9,099	11,051	5,567	642	2,185	3,742	9,135	5,553	102,482

REPORTED HARVEST (NUMBER) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Paddlefish	659	136	906	1,638	75	0	0	0	0	25	397	280	4,116
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0

REPORTED HARVEST (POUNDS OF EGGS) PER MONTH

Species	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	**Species Total**
Paddlefish	1,347	257	1,881	3,949	55	0	0	0	0	0	455	715	8,659
Shovelnose sturgeon	0	0	0	0	0	0	0	0	0	0	0	0	0

*Includes bighead, silver, grass, and common carp.
**Includes gar, bowfin, and eel.
***Includes white sucker, spotted sucker, and all redhorse.